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THE
Lebanon Springs
RAILROAD,

COMPLETING THE MOST DIRECT ROUTE FROM

NEW YORK TO MONTREAL
AND
THE CANADAS,

BY WAY OF

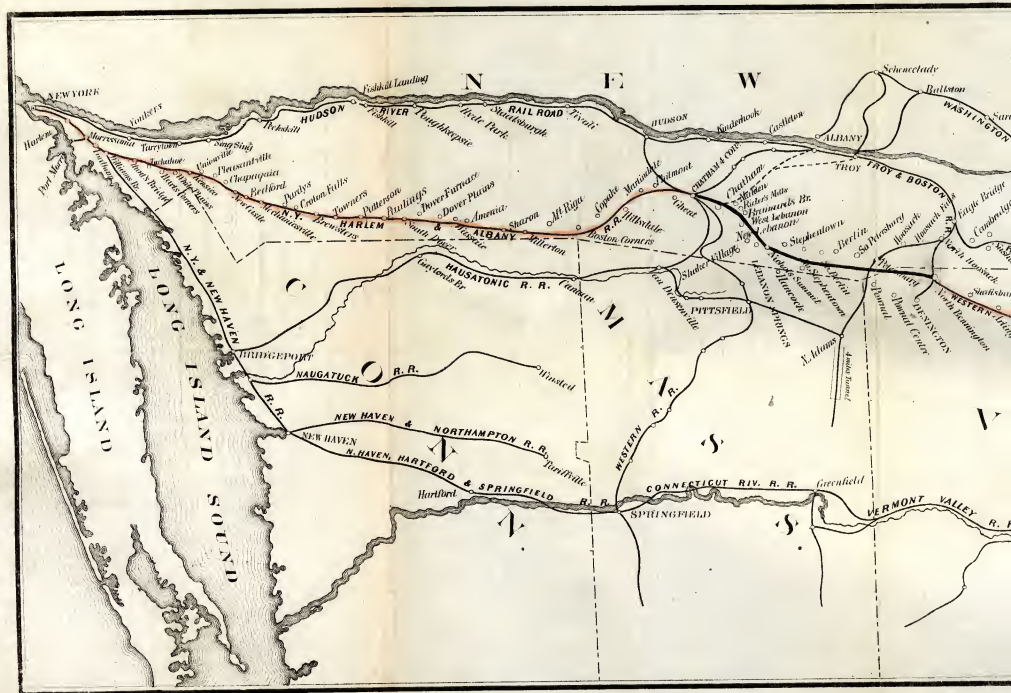
THE HARLEM RAILROAD, LEBANON SPRINGS,
BENNINGTON, RUTLAND, AND
BURLINGTON.

NEW LEBANON, N. Y.

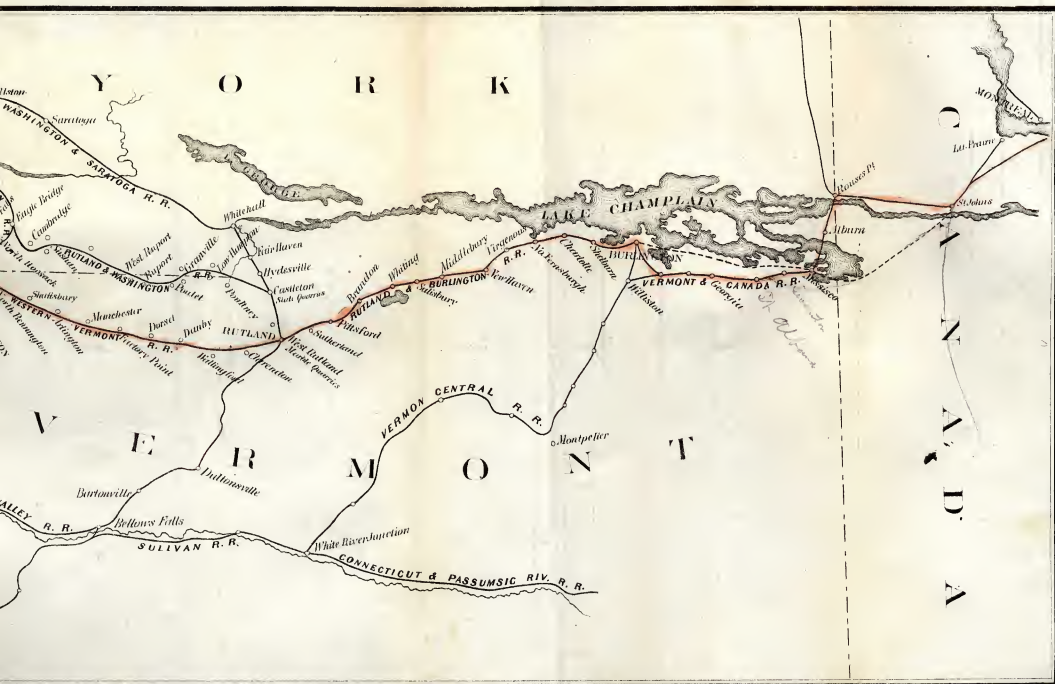
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1866.

ROUTE OF THE LEBANON SPRINGS RAIL ROAD AND ITS



D ITS CONNECTIONS, INDICATED BY THE HEAVY BLACK LINE.



THE LEBANON SPRINGS RAILROAD.

It is now proposed to complete the Lebanon Springs Railroad from the terminus of the New York and Harlem Railroad at Chatham Four Corners, by Lebanon Springs to North Bennington, Vermont, connecting with the Western Vermont, and at Rutland with the Rutland and Burlington Railroad, thereby completing, as will be seen by reference to the annexed map, the last link in the great interior chain of railroads, connecting the city of New York, by way of the Harlem Railroad, with Lebanon Springs, Bennington, Rutland and Burlington, and Montreal.

This company was organized, some years since, under the general law of 1850, and the work was commenced, and for sometime prosecuted; but circumstances beyond the control of the company suspended the work. From that time to the present, little has been done towards resuming the work; but it is now believed a favorable time has arrived in which the resumption of the work, temporarily abandoned, can be made with entire success.

With this view, parties have taken a new and ardent interest in its achievement, and the following statements are submitted for the candid and careful examination of each and every inhabitant of the section through which the proposed road is to penetrate, with a confident hope that a correct realization of their own interests, will induce them to lay aside all prejudices, (if any exist,) and aid, by every means in their power, in completing as desirable and remunerative an enterprise as any that now exists, and which will stand as a monument of the intelligence and public spirit of the citizens of the country.

The difficulties that have been surmounted in the construction of thousands of miles of railroads throughout this country, can be surmounted in this instance by equal energy, perseverance, courage, and enterprise.

It is seldom that there is presented an opportunity of putting in

a *short link* such as this, to complete a continuous line of nearly four hundred and fifty miles, making each of the connected and operated lines tributary to, and sustaining the portion to be built.

The policy of its completion is to be determined, not only by the evidence of its ability from the business it will derive from this long line of connecting roads, from other roads intersecting it, and from its local business to pay expenses of operating, interest upon its Bonds and dividends upon its Stock, but by the general benefits it will confer upon the section through which it passes, in developing its farming and manufacturing interests, the enterprise of its villages, its unoccupied mill sites, its stone and slate quarries, as well as the latent wealth and capital of its townships.

Description of Route.

The route has been thoroughly surveyed, and maps and profiles submitted to the Directors by an experienced Engineer, Mr. Cross, who describes the route as follows :

"The line commences at the termination of the New York and Harlem Railroad at Chatham Four Corners, crosses the Steinkill east of the village, and either follows the slope of the hill, reaching the valley of the Kinderhook Creek about a mile west of the village of Chatham, thence running along the creek to New Bridge, near the village of Malden, (to this point, seven miles, the line is common to the proposed line to Albany,) and pursues the valley to Riders' Mills, thence along the slope of the hill to the summit of Sand Knoll ; or, by what is called the old line, direct to the village of Chatham, and to the summit at Sand Knoll, there intersecting the other line ; thence it decends into Lebanon valley, following the bottom lands of the same to Lebanon Springs.

"From Lebanon Springs there are two routes: one line follows Lebanon Creek to Nichols' Summit, in Stephentown, thence through the east valley of the towns of Stephentown and Berlin, to Berlin Summit, thence down the valley of the Little Hoosick to the Hoosick River at Petersburg, at which point it intersects the Troy and Boston Railroad, thence crosses the Hoosick River and enters the valley known as the Breese valley, in the eastern part of the town of Hoosick, and follows the valley to the summit

near the Wolloomsack River, thence to North Bennington, forming a connexion with the Western Vermont Railroad.

"The other route diverges near Nichols' Summit, and passes through the Hancock and Williamstown valley to Williamstown, thence down the valley of the Hoosick River, intersecting, near the State line, the other route through Breese valley.

"The entire line, generally following the valleys, presents a feasible and cheap route with favorable grades and curves. There are only three points at which heavy work occurs, viz: at the crossing of the Steinkill at Chatham Four Corners, at the Sand Knoll, and at the Summit in Berlin, or in Hancock. With the exception of these sections the work is comparatively light, and the grading on the line by the village of Chatham to the Sand Knoll is nearly one half done, and on that portion from Sand Knoll to Lebanon Springs, about nine miles is nearly completed. With a sufficient force and a proper distribution of labor, the entire line may be graded by the time the heavy sections referred to are in readiness for the superstructure."

Estimate of the Cost of the Work.

The estimates of work to be done, upon which the cost of construction is based, are derived from careful instrumental surveys.

The prices for each kind of work, are those at which work is being done on roads in process of construction, and the decline in grain since these were established, and probable decline in labor, would seem to make them not only ample, but sufficient to cover any contingency that may arise.

The cost of Iron and Superstructure has been estimated at current rates, and is regarded sufficiently high.

ESTIMATE FOR ONE MILE OF SUPERSTRUCTURE.

88 Tons, H Rail, (56 lbs. per yd.)	at \$75	\$6,600 00
6,000 lbs. Spike,	5½c.	330 00
10,600 lbs. Chairs,	6c.	636 00
2,347 Cross Ties,	40c.	938 80
600 Wedges,	3c.	18 00
Frogs, Head Blocks and Switch Stands,		40 00
Delivering Iron, Spikes, Chairs, &c.,		500 00
Laying Track and Perfecting Graduations,		500 00
		<hr/>
		\$9,560 80

SUMMARY.

Grading, Masonry, Bridges, &c.,	\$915,877 91
Iron and Superstructure,	516,285 20
Sign and Whistling Posts,	1,000 00
Right of way,	15,000 00
Fencing,	44,160 00
Engineering, Depots and Contingencies,	60,959 43
Total Cost,	\$1,553,282 54

Local Business.

The route of the road, after leaving the line of the Harlem Road at Chatham 4 Corners, is northerly, near the villages of Chatham, Malden Bridge, Riders' Mills, Davis's Paper Mills, Brainard's Bridge, and East Nassau, situated upon the Kinderhook Creek, at which are located Cotton Mills, Paper Mills, Flouring Mills, &c.; thence up the Valley of Lebanon to New Lebanon and Lebanon Springs, celebrated as a watering place, and visited annually by 5 to 8,000 persons,—where are situated the Shaker Community and a large Manufacturing Establishment, as well as several Flouring Mills, and extensive Slate Quarries being developed, equal to those at Vermont; thence through Stephentown, near the Village of Hancock, which contains Cotton and Woolen Manufactories, and through Berlin and Petersburg, each containing abundance of Water Power, at Petersburg crossing the Troy and Boston Road, intersecting the business from North Adams, Williamstown, Hoosick and Hoosick Falls; thence to North Bennington and Bennington, both supplying a large amount of freight and passenger business to the road.

Besides the business from these Villages, is to be added that from those lying near the line of the Road. From the information and statistics we have obtained from merchants, business men engaged in Manufacturing and Mercantile pursuits, Farmers, and others, familiar with the amount of business done in their respective localities, we have been able to approximate the amount which can be depended upon for revenue to the road; and have taken, in all cases, the lowest estimate.

From these data, we estimate the daily passengers of North

Bennington and Bennington at 20; Petersburg, 5; Petersburg Junction, 10; Berlin, 10; Stephentown and Hancock, 10; Lebanon Springs, 10; New Lebanon, 10; West Lebanon, 5; Brainard's Bridge, 10; Chatham, 15. Lebanon Springs visitors will fully equal 5,000 during the season. These estimated by the distances, and at 3 cents per mile, give a result of \$41,117.

In respect to Freight, including General Merchandise; Coal, Plaster, and other articles, vegetable productions, except Hay and Potatoes; North Bennington and Bennington at 30 tons; Petersburg, 5; do. Junction, 20; Berlin, 10; Stephentown and Hancock, 10; Lebanon Springs and New Lebanon, 20; West Lebanon, 5; Brainard's Bridge, 10; Chatham, 10;—giving an aggregate of 38,000 tons for the year.

It should be borne in mind that the entire section of country traversed by this road, is a rich Agricultural District, contributing to the road a large amount of freight;—to fully appreciate this, it is simply to estimate what a district 3 miles wide on each side of the road is capable of producing and sending to market what it otherwise would not do. 50 miles by 6, gives an area of 192,000 acres, or 1,920 farms of 100 acres each. Suppose, they upon an average, send to market 10 tons of hay each, it gives a tonnage of 19,200 tons; and suppose they furnish an average of 300 bushels of Potatoes each, which is a low estimate, as this is a hay and potato district, we have a further tonnage of 17,280 tons, from these two items—36,480 tons.

To this should be added the various kinds of perishable products, which are not wanting in large quantities in any fertile district like this, and for which there is an abundant and remunerative market in New York.

Another much more important and profitable element of freight, not only to the Road, but to the Farmer, is the Milk Business; and when the Road is constructed, Milk Trains will be organised from such points north as will supply it. The subject is fully discussed and presented in the letter of Mr. Tilden, which is annexed; this is regarded as the best paying freight, and we estimate it will yield \$146,000, with the Milk of only 10,000 Cows.

Having arrived at as great a degree of certainty as any untried enterprise is capable of in regard to business, we have the following as the result. Inasmuch as we estimate for the freight on

Milk, we have omitted the freight on Hay, although it will be shipped largely from some sections.

Passenger Business,	\$ 41,117
38,000 tons Freight,	165,000
17,000 " Potatoes. &c.	42,500
Milk,	146,000
	<hr/>
	\$334,617

Believing the section traversed by the Lebanon Springs Railroad as capable of producing as large a Local Business as any of the roads connecting with it at the north, we have thought best to introduce here a comparison. We find that their average local freight is 1,600 tons per mile, which would produce to our road of 54 miles a tonnage of 86,400 tons, while the entire tonnage we have assumed is 55,000 tons, or 1000 tons per mile.

An analysis of the Passenger Business, to produce the amount we have estimated, would give to four Express Trains, two each way, and two Accommodation Trains, one each way, a day, only 20 passengers to a Train, which any person of experience in Railroads will say is a small estimate for a road, having an aggregate population along its line of over *thirty thousand*.

In this connection, it is to be remarked, that the business of all the towns and villages, both to Hudson and Albany, is quite large, and will increase as the facilities for reaching these places is improved. A morning train, to accommodate the travel, intersecting the morning train from North Adams to Albany, at Chatham 4 Corners, would, we have no doubt, take to Chatham as many passengers as the North Adams train would collect to that point, and it is through this connection that the travel would also go east and to Boston, as well as, for the most part, obtain their coal and plaster from Hudson.

In estimating the business, we have found that the innumerable sources from which it is derived, however small, when aggregated, are astonishing. This arises from the change which has been wrought in the mode of transportation through the introduction of railroads;—there is a tendency to make everything not only railroad freight, but in many instances express freight, and most kinds of merchandise, of hay, lumber and coal, of cattle, horses, sheep, swine and all kinds of live stock, are almost entirely transported by railroad.

Through Business.

For a clear understanding of the relations of this road to other railroads, an examination of the annexed map is only necessary.

Above its northern terminus are the following railroads:

Western Vermont,	54 miles.
Rutland and Burlington,	120 "
Burlington to Rouse's Point, Vermont, and Canada,	54 "
Rouse's Point to Montreal, Champlain, and St. Lawrence, 46	"
Rouse's Point to Ogdensburgh,	118 "
	392 "

At the southern terminus are the

New York and Harlem,	130 miles.
Western, to Albany,	23 "
" to Boston,	177 "
Hudson and Boston, to Hudson,	17 "

The passenger and freight business of these roads destined to New York, particularly above Burlington, passes over the Vermont Central and Connecticut River Roads to New Haven; thence by boat or rail to New York. This route is circuitous, expensive, and liable to delays. The business below Burlington passes in part the same way, and part over the Western Vermont and Rutland and Washington Roads to Troy; thence by the Hudson River.

Inasmuch as this link will form, with the Harlem Railroad, the shortest and most direct route for the entire passenger and freight business of the North to New York, with an organized system of running arrangements, which can be made when the line is completed, creating a continuous line, without change of cars, from New York to Burlington and Montreal, there can be no question as to the course the large business from that section will take.

The business of the several Northern roads, according to the latest reports, was as follows:

	Passengers.	Freight—Tons.
Rutland and Washington, }	156,912	215,127
Western Vermont, }		
Rutland and Burlington, through,	63,374	128,702
" " way,	108,639	150,116
Champlain and St. Lawrence,	—	—
Rouse's Point and Ogdensburgh,	141,680	230,201
Rensselaer, Saratoga, and Whitehall,	381,101	139,497
Champlain Canal—average 6 years,		624,316

Average tonnage per mile, about 1,600 tons.

It will be observed that the passenger and freight business of the parallel roads—Rutland and Washington and Western Vermont—is,

Passengers,	156,912
Freight—tons,	265,187

Of the Rutland and Burlington Road—

Passengers,	142,628
Freight—tons,	145,537

From estimates derived from the managers of these roads, it is safe to assume that fully one half of their business seeks New York, and is now divided; but would seek a continuous line, and to that extent would form a permanent business over our road.

To make the estimate of revenue entirely safe, we will assume only one third of this business, which gives :

51,634 Passengers, at \$1.50	\$ 77,451
88,879 Tons of Freight, \$2.50.....	220,947

Total Through Business,	\$298,398
To which add Local Business,.....	384,617
Mail and Express,	20,000

Total,.....\$658,015

Assuming that it would cost 60 per cent. of the gross earnings for operating the road—or..... 391,809

We have remaining, applicable to interest on the Bonds and dividend upon the Stock,\$261,206

Plan and Resources for Constructing the Road.

It is proposed to build the road with cash, and in the most economical and thorough manner. To obtain the requisite amount, it is proposed to issue First Mortgage Bonds, and it is made a condition of the subscription for the Bonds that each subscriber shall be entitled to receive an equal amount of Stock without further payment; that the subscription shall not be binding until the sum of *one million five hundred thousand dollars shall have been subscribed*; and that interest shall be allowed on each installment from the time of its payment.

The Directors are determined to provide the means before commencing the work. This is the only true and economical way of

building any road; it avoids the extra expenses and vexations which inadequate means, floating debts, &c., bring, and are the causes which ruin so many enterprises.

The plan of giving an equal amount of Stock with the Bond is deemed proper, because the Stock will be required to represent the road after the Bonds are paid off, as well as for its corporate management,—that it is but just that this representation should exist in those who furnish the means to build it. It possesses a twofold advantage to the bondholder; he not only is a part holder of the only security on the road, but is to an equal extent an owner of the property and possesses an equivalent interest in its earnings and success, as well as an equivalent interest in its management, to the end that the road not only pays the semi-annual interest of 7 per cent. upon the Bond he holds, but earns a surplus to be applied to dividends upon the Stock he holds.

We have stated the cost of completing the road to be about fifteen hundred thousand dollars, and the revenues of the road at six hundred and fifty thousand dollars.

We submit that every disinterested person must concede, when carefully analyzed, that they are fairly stated, and are not in excess of what an average business of the road should produce, and much below what its most sanguine friends expect, who believe the road is destined to do an amount of business exceeding even their own estimates. But allow the most cautious and prudent to make their deductions, even of one-quarter, and we have left sufficient, after paying 60 per cent. for operating expenses, to pay the interest upon the Bonds and a dividend upon the Stock.

The Directors and friends of the road, influenced by these evidences of business and security of investment; those interested in the connecting roads, have made liberal subscriptions; the farmers on the line of the road have generally been liberal in donating the right of way; others, liberal in gifts for other purposes; the old stockholders, in surrendering to the Company all claims to the work already done upon some portions. Yet, with all this liberality, there is a deficiency of about four hundred and fifty thousand dollars.

The question presented is, how is this sum to be made up? Is it just and proper to ask those who have already made liberal subscriptions to increase them? Can it be reasonably expected

that they would do it? Shall we abandon an enterprise that stands in respect to subscriptions in a better position than any other ever started,—which promises not only to be remunerative to the bondholders and stockholders, but of great value to the section through which it passes,—or shall we meet the question as intelligent citizens ought to do, grateful for what is tendered us, and aid by every means in our power by liberal subscriptions on the part of the towns on the line?

Town Subscriptions to First Mortgage Bonds.

It is asked of the several towns through which the road is proposed to run to aid to a moderate extent in its completion by a subscription to its Bonds, and to issue Town Bonds to an equal amount, payable from ten to thirty years from date, bearing the same rate of interest as the Railroad Bonds subscribed for, the towns to receive according to the terms of subscription in addition an equal amount of the Capital Stock of the Company.

The motive for this mode of raising the means is simply that the majority of persons in the towns are desirous of aiding the road to the extent of their means. They are unacquainted with railroad securities, and the usual denominations of railroad bonds are larger than their means will permit them to take. They are acquainted with the character of the bonds of their own towns, and will invest in them, and these can be made of such denominations as will accommodate the people. It is to be regarded more in the light of an endorsement and an accommodation to the public than in any other respect, because the interest that will be received every six months from the Railroad Bond will pay the interest on the Town Bond.

Any surplus earnings of the road beyond the payment of interest upon the Bonds will be received by the town as dividend upon the Stock, and it is to be reasonably expected that as the people of the towns become more acquainted with railroad securities they will exchange the Town Bonds for the Railroad Bonds, and thus in a few years the Town Bonds will be wholly withdrawn and cancelled; or the Bonds can be sold when the road is completed and they have a market value.

Thus they are accommodated, and are enabled to aid in securing to themselves a benefit for all time. One scarcely to be over-estimated, without much cost to themselves, and with less risk than usually attends other ordinary business transactions.

The only risk incurred is whether the net revenues of the road will be sufficient to pay the interest upon the Bonds it can issue, which is restricted to two millions of dollars, and will not probably exceed one million six hundred thousand dollars. Upon this point, we have submitted fully our views in the previous pages, and believe those estimates entitled to confidence.

Capitalists who are constantly investigating this subject for the purpose of securing good investments for income, have fully investigated this point, and have made large subscriptions. The reasonings and judgment of men of this character are entitled to confidence and consideration. They invest for an income. The towns are equally secure in an income, and are largely interested in the benefits they secure in addition.

It is a noticeable fact that there is not a railroad in the State of New York that does not pay the interest upon its bonded debt, promptly; that the average earnings of 2,511 miles of finished railroads in the State of New York was, by the last Report of the State Engineer, \$16,400 per mile.

If we deduct from the number of finished roads the four most important,—New York and Erie, New York Central, Harlem, and Hudson River,—we have remaining 1,222 miles, which embraces all the short roads having no profitable connections. These show an average earning of \$7,500 per mile.

By an interesting table in Hunt's Merchants Magazine it is shown that for ten years the average earnings per mile of all the roads in the State of New York has been \$9,207 for each year, and that the profits of each year, after deducting operating expenses, have averaged $37\frac{1}{4}$ per cent., leaving, after paying the interest upon their debts, $6\frac{1}{2}$ per cent upon their stock.

The through lines in the State of New York have earned \$24,500 per mile,—not only interest upon their bonded debts, but over 10 per cent upon their stock.

These are the facts in regard to all the railroads in the State of New York. They are facts that speak for themselves.

To pay the interest on the Bonds, will require only an Earning

of \$6,000 per mile; all the Earnings beyond that amount, will be for the benefit of the Stock.

When completed, this road takes its position as a through line from New York to Montreal. On opening it enters at once upon a large existing business, awaiting its completion, and which is entirely independent of its local business, it is reasonable to suppose it will earn an average of the poorest roads in the State;— if so, it will pay the interest on the bonds and have a surplus of $2\frac{1}{2}$ per cent. on the stock.

Or, if it will earn the average of the roads in the State for 10 years past, it will pay the interest on the bonds, and have a surplus of $4\frac{1}{2}$ per cent. on the stock.

Or, to meet the question with all fairness, we will assume for it as a through line, earnings equal to one half of the other through lines, which is less than the average earnings of the roads in the State, it will pay the interest on the bonds, and leave a surplus of $8\frac{1}{2}$ per cent. on the stock.

Or, if it will earn what we have estimated, it will pay the interest on the bonds and $8\frac{1}{2}$ per cent. on the stock.

Or, allowing from these estimates, a deduction of one-quarter as proposed, and it will pay the interest on the bonds, and nearly 5 per cent. on the stock.

Or, if it will earn the average per mile of the roads *with which it will form a through line*, it will pay the interest on the bonds, and leave a surplus of over 9 per cent. on the stock.

We believe we have presented the subject in all possible aspects; it is idle to pretend that a road situated as this will be, in regard to other roads, through as rich an agricultural district as any other road in the State, will not do a business relatively with other roads; and assuming it to be only equal to the average of the poorest, *it will yet have the ability to pay the interest on the bonds.*

We believe that the Stock which will be held by the towns will prove remunerative, and that it will produce for each town a fund which will pay its taxes for all time, and leave a surplus besides, and that the question with the people of the towns will not be concerning the interest upon the bonds, but how large a dividend they will derive from the Stock, and we submit whether there is not a greater prospect that the towns will be free from taxation, from this source, than that they will ever be liable, in any respect, upon the bonds.

To fully provide that any and all moneys derived from the Bonds issued by the town shall be used for the completion of the road through their respective towns, the bill provides as follows :

"And the money that shall be raised by any loan or sale of town bonds, shall be invested in the first mortgage bonds of the Lebanon Springs rail road Company, and the said money shall be applied and used in the construction of such rail road, but only in the purchase of iron rails and other materials for its superstructure, the laying of the same, and in its building and necessary appurtenances, *and for no other purpose whatever*, the true intent and meaning of this provision being that the town subscriptions shall be used to aid in the completion of the said railroad after it shall have been graded through the respective towns making the subscriptions."

Any wilful misapplication of the money, embezzlement, or wilful conversion of the Bonds is made a felony, punishable by imprisonment in the State prison, for a term not exceeding ten years.

The Effect of Building the Road upon the Value of Real Estate.

In considering the causes which have tended to make this country so prolific in its agricultural wealth, and given to land the value it now possesses throughout the States, but one conclusion is forced upon every reflecting mind : the fact that to the railroad enterprise of the people, more than to any other one source, are we indebted for the wealth and prosperity we now possess.

The great increase in the value of property, from the opening of railroads is so universally conceded, that it seems unnecessary to dwell upon it. To show how slight an increase per acre would suffice to build the road, we present the following table, which experience on other roads has demonstrated to be below the actual increase, particularly upon wood land :

Miles each side of Road.	No. acres both sides per Lineal Mile.	Average Increased Price.	Amount per Mile.	Miles of Road.	Aggregate Amount.
1	1,280	\$15 per acre.	\$19,200	54	\$1,036,600
2	do	10 "	12,800	54	691,300
3	do	5 "	6,400	54	345,000
4	do	1 "	1,280	54	86,000
					<u>\$2,159,600</u>

This exhibit shows an amount exceeding, by a half Million of Dollars, the cost of the Road. This is no over estimate, and we think we are safe in challenging a case where the aggregate results have been less.

three thousand millions in the value of farms, or four times the amount expended; and, therefore, we think we are very safe in the conclusion, that an expenditure of \$1,600,000 will increase the value of property along the line of this road \$2,150,000, and this gain is derived to the farmers and residents by the expenditure of only \$350,000 of their own money; the balance being mostly capital of non-residents.

The report shows that upon every mile of road built, the increased value of property each side, per lineal mile, has been \$100,000.

We all know that lands are valuable according to the net value of their crops when marketed; that their value is diminished by every dollar which it costs to take produce to the great markets of the country; that if it costs the farmer four or five dollars to deliver a load of hay or potatoes, it will not pay, unless they are sold at very high prices,—even then, the hauling of a large crop of either such a distance that but one load a day can be delivered, the labor becomes such a burthen, requiring so many teams and much time, that he is disposed the next year to raise some crop requiring less labor, even though producing less profit.

To bring this subject more particularly to the understanding of the reader, we refer him to the agricultural statistics in the table annexed.

Another important element to the towns, is the cost of the road in each, as added to the valuation, by which it decreases to that extent, the tax on other property.

We find that many of the towns in Columbia County are relieved from a large portion of their taxes by the railroads passing through them. The following table shows the amount they are assessed, and the percentage this assessment forms of the valuation of real estate and length in each town:

	MILES.	Supervisor's Valuation.		PER CENT.
		OF REAL ESTATE.	OF RAILROAD.	
Canaan,	8	\$ 453,860	\$175,000	39
Chatham,	10	1,089,949	360,000	33
Clermont,	2½	260,112	60,000	22
Germantown,	5	236,218	100,000	42
Greenport,	5	364,864	190,000	29
Livingston,	2	277,500	85,000	15
Stockport,	6	185,820	100,000	54
Stuyvesant,	8	460,672	111,527	24

The distance in Chatham will be 10 miles; New Lebanon, 10 miles; Stephentown, 7 miles; Berlin, 7 miles; Petersburg, 7 miles.

We have carefully computed the amount of business already done upon the proposed route, in the transportation of passengers and freight. Estimates of this character have been found by experience, to afford a very uncertain index as to the actual business that would result under the new circumstances. A more enlarged view of the conditions of the country through which the road is to pass is necessary, and a careful consideration of the effects already experienced by the opening of new roads in other sections.

In a prospectus published by the projectors of a railroad in 1830 in New England, it was estimated that one half the passengers traveling, on the proposed route might, in consideration of lower fare, be induced to travel on the railroad. It was found, however, that not only did the whole travel pass over the road, but that it was quadrupled in a very short time.

The development of the traveling propensities of the people is remarkably illustrated by the results of some of the eastern roads:

ROAD.	Estimated No. passengers before road was built.	No. soon after road was opened.	1843.	1860.
Boston and Worcester,	23,500	262,830	807,143	1,601,013
Boston and Lowell,	37,400	400,886	525,764	
Fitchburgh, - -	71,793	327,004	745,825	788,157
Eastern, - - -	121,700	438,026	1,021,169	1,378,963
Boston and Maine,	120,000	462,426	1,051,569	1,868,797
Albany & W. Stockbridge,	48,816			264,147

A similar increase has been experienced also upon most roads, in the amount of freight transported.

We believe that a similar experience will characterize the estimates of business we have made; these estimates have been submitted to, and discussed with, men of experience in railroads and their sources of business; and are regarded as low estimates. Offers to lease the road for a sum annually, that will pay the interest upon the bonds, have been made by responsible parties; but it is believed that the stock will be as good as the bonds, and we do not consider there exists a question as to the interest upon the bonds being earned and promptly paid, or that this can be affected by any contingencies likely to arise.

We believe that the stock will be a source of revenue to its holders, and that to the extent that the towns shall hold of the

stock, they will in a short time be possessed of a fund which will relieve them of taxation, County and State.

The towns on the line of the road are now paying annually, taxes, from three to six thousand dollars each;—a subscription by each town of one hundred thousand dollars to the bonds, will give them one hundred thousand dollars of stock, from which, in less than two years from the opening of the road, we believe they will derive a dividend that will pay their taxes. We are convinced the business of the road justifies this assurance.

What would be the ultimate effect of such a result upon your property and the growth of your villages, joined to the other benefits which experience has shown railroads to bring.

The people seek investments in Government Bonds to avoid taxation. Present to the world the anomaly of the towns on this line, a through road from New York to Montreal, being possessed of a fund that relieved them of County and State taxes, would not your lands be sought and your villages be filled with residents? This is no idle dream—it is only a question of time, and is a question of too much importance to their ultimate prosperity and welfare to be passed over and treated lightly.

There is not a town on the line of the road but what should subscribe for the largest amount of bonds allowed by the act. It is simply an endorsement of the bonds, for which they are amply remunerated, not only in the comforts and conveniencies which the road brings, in the advance of at least three fold in the property of the town, but in the stock, which must prove remunerative, if the people of the towns are possessed of the enterprise and energy of other places, and we believe they are.

They are asked to do this with the positive assurance of the act, that the money thus raised upon the town bonds shall not be expended until capitalists have expended more than twice as much in each town as is asked of the town, with precisely the same guaranties in regard to the interest upon the bonds, and dividend upon the stock, derived from the business, and with none of the prospective rewards in regard to the advance in the property which you have by experience, a promise of, and which is so important to you.

If they do not hesitate to aid you, why should you hesitate for a moment, to aid yourselves?

The question with the towns is a momentous one, and one that should be well and fully considered by every inhabitant in them. The aid asked from them is indeed trifling, compared to the benefits they are to permanently derive;—it is to them almost a question of permanent isolation, of protracted inconvenience,—or one of lasting comfort, convenience and prosperity. It only requires of them one effort, but no possible sacrifice,—an effort which they will never have to repeat,—and as they now decide, so will be the result. If this effort fails now, and the interests of those who are willing to aid, becomes diverted, it will be a permanent failure;—for by no possible efforts can the same interests be brought together again,—or a combination made that will give a shadow of hope. With them, therefore, rests the whole question—upon them hangs its destiny—and upon them will forever rest the reproach or gratitude of their descendants.

To the Committees of the several Towns on the Line of the Lebanon Springs Railroad:

NEW LEBANON, Feb. 22, 1866.

GENTLEMEN:—

Numerous enquiries having been made, and doubts expressed in regard to the amount of business which would be done by our proposed Road, and as to the advantages which would result to the inhabitants, I propose to make a general answer. So many facts present themselves, that I shall be obliged to omit very many strong ones, and content myself with collating the more prominent ones, and stating them as briefly as possible.

To all communities a railroad has become a matter of necessity. All business conforms to it. Even the Hudson river must have a railroad upon its banks. Scarce a person can be found who will locate unless within convenient distance of a railroad. One of the first questions asked, when looking for a location, is—how far is it from a depot? On the other hand, in offering a place for sale, the most prominence is given to the fact of its being “of convenient access,” &c.

We are now living in a fast age, an age when more progress is made weekly than was made in a year one hundred years ago. Sixty years ago, a continuous Turnpike from Boston via Lebanon Springs to Albany, and thence to Niagara Falls, was made the subject of a long article read before the “State Society for the promotion of useful Arts, &c.,” setting forth in glowing terms the advantages the State was to derive from its Turnpikes. In a few years followed our system of Canals. Traveling on a packet was deemed the height of a travelers felicity. All were content to be several days making the passage from Albany to Buffalo; now, if the traveler is over ten hours making the trip, it forms the subject of complaint.

Only thirty three years since, the railroad from Worcester to West Stockbridge, under the name of the Western Railroad, was chartered as a horse railroad. Toll gates were to be established, and any man could put his car on and run it by conforming to the rules and regulations of the company. A few years later the Albany and West Stockbridge Railroad was chartered. Judge

Cheever, in a letter to an Albany paper, after a careful and minute investigation, gave as the estimate for the business which would pass over the road for a year—48,816 passengers, 47,233 tons of freight. The actual result so far exceeds his modest estimate that I place it by its side. The number of passengers carried in 1864 was 264,147, and of tons of freight 489,724,—the passengers having doubled about six times, and the freight ten times, over his estimate.

Circumstances have compelled me to devote much time to the investigation of the whole subject for the last dozen years. If the labor bestowed should result in a beneficial influence upon our community at large, my principal aim will have been accomplished.

To sum up the result of this investigation, I assume the following propositions, and give you the facts and figures upon which I found my conclusions:

1st. That it is becoming absolutely necessary for our agricultural community to seek some more profitable kind of agriculture to sustain the value of their lands by affording a better recompense for their labor and investment.

2d. That the growing of wool is to become less and less profitable, owing to the competition of the great west, California, and the large importations of foreign wools.

3d. That the cheap grains of the west is rendering it unprofitable and unwise to depend upon grain as a large source of income.

4th. That the superceding of wool and grain by milk, potatoes, hay, vegetables, and other bulky and perishable articles, which will not bear transportation from a long distance, will afford a larger income, and prevent a gradual decline in the value of our farms.

5th. That the development of our mineral resources, and the occupation of the fine water powers, will not only have the effect to retain our active enterprising men, but will bring in capital.

In order to accomplish these results, any one with half an eye will admit there is but one way, and that is in increased facilities afforded by a regular and convenient mode of transportation.

If all this can be done, and at the same time be made self-sustaining, as we feel assured it will be, what greater recompense can those who aid have, than in the gratitude of a generous public? I have no doubt that even those who have fears, or are opposed to

our plan, will be among the first to avail themselves of its benefits, and thus by their acts praise us, if their lips do not.

I submit very full statistics of wool and of milk. The table showing the quantity of milk sent from each depot on the Harlem, Erie and Long Island roads is a very interesting one. It will also be seen that one-half the supply is carried in by wagons. As fresh country milk is produced and sent to market, it drives out the swill milk.

The table showing the production of corn and oats in 1850 and 1860 in the Western States shows a rapid increase, while in the state of New York it is nearly at a stand still.

Potatoes and vegetables are quoted at this time in New York :

Shipping, in bulk, . . .	\$2.00 to \$2.75 per Bbl.		
Peach Blows,	2.25 "	3.00	"
Mercers,	2.50 "	3.50	"
Buckeyes,	1.75 "	1.87	"
Prince Alberts,	2.25 "	2.50	"
Jackson Whites,	2.25		"
Beets,	1.75		"
Parsnips,	2.75 "	3.00	"
Carrots,	1.75		"
Onions, Red and Yellow,	1.50 "	1.75	"
" White,	6.00		"
Squash, Boston Marrow,	4.00		"
Turnips, White,	1.75		"
Red Cabbage, per doz. . .	1.50		

The freight from Chatham 4 Corners, in bulk, is only 12 cents per bushel, equal to 31 cents per barrel. Carrots and other vegetables could be sent at same rates, in large quantity.

Apples, onions, and other vegetables, when sent in barrels, are rated at 150 lbs. weight, and carried for 66 cents.

With the prices of the various kinds of vegetables in the New York market and the charges of freight before him, every intelligent man can determine for himself how profitable the raising of them for the New York market will be. If the market gardeners on the sandy lands of Long Island can make it profitable to pay high prices for the land and four or five dollars a load for manure, why cannot our farmers compete, with their richer lands and manure almost without cost?

With railroad facilities, numerous slate quarries on the line can be worked profitably. They were once worked, but the expense of transportation was too great to render them profitable; hence this branch of business was driven to sections more favored by railroads. The extent to which it is carried on can be understood, when it is known that over 1000 men are employed in the quarries near Castleton. Slate affords a large tonnage. If ours prove as good as the indications now warrant us in believing they will, this can be made a large business, and has the advantage of being about 100 miles nearer market.

We have unoccupied water power, to a large extent, and, in some respects, superior to any power in this section. Between Bernice Smith's mill in this town and Newton Gould's in Stephentown, a distance of some three miles, that branch of the Kinderhook Creek falls over 200 feet—in one mile, about 100 feet—thus affording power for six large factories of over 30 feet fall each. Now, these powers have scarcely any value; but why should they not be sought as desirable locations when easy transportation facilities are offered? Farther down the stream other valuable powers exist, particularly at East Nassau. There is no reason why enterprise and capital will not gradually occupy them all. At Petersburg and at South Williamstown are valuable water powers.

On the north end of our road and near Bennington are immense tracts of wood and timber land. One party interested in the building of our road, owns and controls 30,000 acres, estimated able to furnish 150,000,000 feet of lumber, and 1,500,000 cords of wood. They have a charter to build a railroad to the lot, 7 miles.

At the south, and connecting by railroad with our road, there are the West Stockbridge and Richmond Iron ores. On the Harlem, at Copake, Ancram, Amenia, and other points, large ore beds are worked, all of them of the most superior quality.

I predict that it will be but a short time before this ore and fuel will be brought together through the agency of our road. One furnace would furnish 50 or 60 tons of freight daily.

When we add to this possible source, the surplus hay, vegetables of many kinds, and the large potato crop which would be raised, does it seem possible the road would not earn enough, from its local business, to pay \$120,000 per year, the interest upon the bonds we propose to issue?

The table accompanying the estimate for business shows that the average earnings of all the roads in the state was \$16,400 per mile. Deducting the four largest, but including all the poorest, shortest, those without good connexions, they still average an earning of \$7,500 per mile.

An earning of \$6,000 per mile will pay the expense of our road, estimated at less than 60 per cent., and pay the interest upon its bonds.

While on the subject of the cost of running, I will state that the managers of the Harlem road have offered to furnish the engines and cars, and run the road for us, for a share of its earnings. Such share will not exceed 60 per cent., and may be less. Therefore, it is clear, if we make such an arrangement, we shall have some income to apply on the interest, even if the road should do the small business which those opposed to us from interested motives predict.

I think the estimate for business is smaller than the facts warrant. Perhaps no road was ever built so peculiarly situated as ours,—the last link in a long chain. On the north there are connecting roads of over 300 miles,—on the south, the Harlem, 130 miles,—each paying tribute to us for all the business they create. Connecting as we do with roads having machine shops, depots, engine and car houses, &c., &c., we avoid the usually large expenditure at one terminus, if not at both.

From the west end of New Lebanon, the road follows a succession of valleys all the way north, with very little expensive work, and, most of the way, exceedingly light.

The effect it must have upon the general interest of the country in developing its mineral and agricultural resources, and thereby largely enhancing the value of real estate, is so apparent that I need not dwell upon it. Any candid man must concede this.

I will merely relate two facts which have recently been told me. A farmer, near Cobleskill, forty miles from Albany, across whose land the Susquehannah passed, was so provoked that he offered to sell his farm at ten dollars per acre less than it was worth. He was asked his price, named fifty dollars per acre, it was accepted, and that afternoon appointed to conclude the contract and pay over the money. Well, said he, "*I must consult my wife, she may not be willing to sign the deed.*" The consultation was had, and she declined

to sign the deed. That farm has recently been sold for \$125 per acre. Throughout that section, lands have increased in value in like proportion. Being modest in our estimates, we have only assumed \$5 to \$10 per acre as the increased value on our line.

The President of the Susquehannah Road, Mr. Ramsey, told me recently that they encountered great opposition to the town subscription at first, but that when the people found they were sure of the road, or had realized the benefits, all were satisfied. Only this fall, he met one of the most determined opponents, (an old political friend, who had become estranged from him because of his persistence in pressing town subscriptions,) at the depot, with a load of produce, who approached him with his old cordiality and said: "I owe you an apology; you know I was opposed to the town subscription, thinking that it would never do me any good. But I have kept an account with the railroad, and find that my crops have, this year, brought me \$146 and some odd cents more than they would without the road; and in making up my account I have not leaned to the road, while my tax was only \$26."

It must be recollected that their subscription was to the stock; that the road not being finished, and in a condition to earn, the towns were obliged to pay the interest on their loan.

In this respect, our plan is entirely different. The Company allows interest on the installments as they are paid in; and the moment the road is opened, it will commence earning money, more than sufficient, we think, to pay the interest on the Bonds.

After preparing that portion of this letter relating to milk, I wrote to a friend in New York, intimately acquainted with the whole business, the supply and demand, asking his views about the practicability of sending milk from the line of our road. In answer, he states that the prices for the last year have averaged about four cents for summer, and six and a half cents for winter; that three cents for summer, and four and a half cents for winter at the depot is a safe calculation; that the market would take more, provided the quality was good.

I find a report made by Col. Zadock Pratt to the Patent Office, wherein he gives the weight of milk and the pounds of butter made from fifty cows for five years in succession, from 1857 to 1861; that his cows were in milk about eight months; that for this eight months, they averaged over nine and a half quarts per day,

or 2,390 quarts per year; that the largest yield was in 1857, 2,545 quarts, the smallest in 1861, 2,289 quarts; that the average quantity used for a pound of butter was 14.46 quarts; that in 1857 twenty quarts were used, in 1862 ten and a half quarts were sufficient. This result was produced by discarding those whose milk was deficient in butter-making qualities, and replacing with better cows.

When it is remembered that these cows were milked only eight months, while those kept for milk could be milked ten months, it confirms my estimate of 2,920 quarts per year, and of the average quantity used for a pound of butter.

He also shows that the milk of October and November will produce 23 per cent. more butter than the average of the season.

In my estimate of the value of the milk, I have assumed three cents. This will doubtless be the lowest summer price, and when at three cents for summer, four and a half will be a safe price to estimate for the winter. The rule is to divide the seasons,—summer from Apr. 1st to Oct. 1st, and winter from Oct. 1st to Apr. 1st,—so that when the milk will produce 23 per cent. more butter, it sells for 50 per cent. more than summer milk, making it equally profitable to sell.

Another profitable source of income will be opened to the citizens all along the line of our road,—if they will avail themselves of it,—by simple preparation; that is, taking summer boarders. With railroad facilities for ingress and egress, every house along the whole line of our road could be filled with summer boarders, and at such prices that ten boarders would pay more money for the three months board, than all the crops sold from an 100 acre farm would average.

Again requesting a careful study of the statistics and tables, I am

Very Respectfully Yours,

M. Y. TILDEN.

M I L K .

The annexed table (No. 1) showing the principal milk-producing district on the Harlem road, commencing above White Plains, 24 miles north of New York, and extending through the east part of the counties of Westchester, Putnam and Dutchess to the south line of Columbia, embracing a distance of 65 miles, and including a few of the adjoining towns from which milk is carted daily eight to ten miles to the R. R., gives a comprehensive and condensed view of their productions.

Table No. 2 is arranged in the same manner, showing the relative productions of the towns on the line of the proposed Lebanon Springs Railroad, to which the statistics of Hancock and a part of Williamstown should be added.

By a careful analysis of the tables, it will be found that the towns on the line of the Lebanon Springs Railroad have a denser population; that while the valuation of their real estate is equal to \$50 per acre on the improved land, ours is but \$26 per acre, including Chatham and Hoosick, two of the richest towns in the State. Excluding the two towns named, the remaining ones fall below \$16 per acre.

That they produce $3\frac{1}{2}$ bushels grain per acre.

" we " $3\frac{2}{3}$ " " "

That, reducing the sheep in both tables to an equivalent of cows, allowing eight sheep to be equal to one cow, they average one cow to 9.73 acres; we average one cow to 10.26 acres. Excluding Chatham and Hoosick, the remaining towns average one cow to 11 acres.

This analysis shows clearly that our towns possess every element of productiveness of theirs; and further, that with the same system of husbandry, our lands would improve and increase in productiveness, more than sufficient to make up for any advantage of nearness to market they now possess over us.

If the premises established by these tables be true, then we have the right to assume that our towns possess the capacity of keeping from 12,000 to 15,000 cows for the purpose of supplying milk for the New York market, besides those required for family use. That the number can be largely increased beyond this estimate, as the demand and price may warrant, is beyond doubt; but for the purpose of showing the income they may be made to produce to the farmers, and freight to our road, I propose to take a number much less than our conceded capacity, and will base my calculations upon 10,000.

All the testimony I have gathered for years, from various reliable sources, concurs in establishing eight quarts as a fair average daily yield of a herd of cows, which gives 2,920 quarts as the yield for a year.

2,920 quarts at 3 cents, produces	-	-	\$ 87.60 per year.
" " " 4 " "	-	-	116.86 "
" " " 5 " "	-	-	146.00 "
10,000 cows at 3 cts. — \$ 87.60 each,	-	-	\$ 876,000
" " " 4 " " 116.00	-	-	1,168,600
" " " 5 " " 146.00	-	-	1,460,000

which would be paid the farmer for milk alone.

This sum looks so large I should be inclined to think it almost incredible did I not know that several years ago when the Harlem was charging only three-fourths of a cent per quart for its transportation, their revenue from this source alone amounted to over \$300,000 per year, requiring the milk of about 20,000 cows.

The milk of 10,000 cows at one-half cent per quart would pay the R. R. Co. as follows:—2,920 qts. to a cow at $\frac{1}{2}$ ct., \$14.60 each; 10,000 cows at \$14.60 each, \$146,000 for freight.

In changing from sheep to cows it becomes necessary to know how many cows the forage now fed to sheep would keep. I find the estimates run from six large coarse-wooled to seven or eight medium. Assuming the highest number, eight sheep, as being equal to one cow, I propose to make a comparative calculation showing the productiveness of both.

I have shown that the average yield of a herd of cows is eight quarts a day, or 2,920 quarts per year.

2,920 quarts at 3c., \$87.60.	30 cows at 87.60 each,	\$2,628.00
240 sheep, 4 lbs. each, 960 lbs. wool at 60c.,	\$576	
80 lambs and surplus sheep sold \$2.50 each,	200	776.00

Difference in favor of cows, \$1,852.00

I have allowed the increase of the flock to be one-third, and by this calculation make the flock average \$3.25 per head. This is a large average for a term of years, and there is more probability of milk selling higher than three cents than there is that wool will sell as high as 60 cents.

To the cows must be charged the extra labor of milking and drawing the milk to the depot. After making a liberal allowance for this, there will be a large margin left in favor of the cows, showing them to produce nearly three times as much income.

Some may doubt that a cow will yield 2,920 quarts in a year. The Reports of the State Agricultural Society all confirm this estimate. They also show that it takes 14 quarts, on the average, to make a pound of butter. We often hear farmers say a good herd will average 200 lbs. of butter. 2,920 quarts divided by 14 gives 208 $\frac{1}{2}$ lbs.

They also show that five quarts is a fair average for a pound of cheese. The recent reports from 425 cheese factories, using the milk of 128,526 cows, confirms the correctness of this estimate.

When milk sells at three cents per quart, the stock used for a pound of butter costs 42 cents, and a pound of cheese 15 cents. Three cents for milk is a moderate price, while 42 cents for butter and 15 cents for cheese are extremely high prices,—double the average price for a series of years. At the present time cheese made at the cheese factories is ruling very high. The danger is that the factories are increasing so fast that an over-supply will be produced.

I have often been asked the question, can milk be carried from this section to New York? The fact that milk has been carried from Greenbush, and other stations on the north end of the river road, is a sufficient answer.

The only secret about sending milk to New York, is the care with which it is cooled. The animal heat must be removed as soon after milking as possible. This can be best done by setting the cans in cool water, (having great care that none gets inside.) Spring water is usually sufficiently cool, but if there be any doubts a few dollars will build an Ice House, which will more than pay for itself, in comfort to the family, each year.

At the same time there must be a rapid and certain means of conveyance: this can only be obtained on through connecting lines. For many years the Harlem road has run its principal milk train from Millerton, with great regularity, seldom failing to arrive in New York long before daylight, thus giving the dealers ample time to distribute it in season for breakfast. This milk train has the right to the road, even over express passenger trains.

Doubts have arisen in the minds of some about the market taking all the milk which can be produced. New York City, Brooklyn, and the adjacent cities and villages, contain a population of over one million and a quarter. Their natural increase will double it in about fifteen years, giving, fifteen years hence, two and a half millions; and thirty years hence, five millions. To the local population we must add the immense and yearly increasing throng of strangers daily fed in the city.

Whence is this rapidly increasing number to obtain their daily supply of milk? There are but two principal sources of supply; over the Erie railroad, from the Orange and Sullivan milk district, and from the mountainous range of the eastern portion of the state traversed by the Harlem and our proposed road. More or less can be furnished by the towns near the river; occasional good grazing farms can be found, but as a whole they cannot rely upon their pastures "holding out" through the dry warm months of summer and autumn, nor upon as natural sweet feed for the cows.

There is more doubt about these districts being able to supply all the milk required, than there is that it will not be wanted. I hope to live to see the time when every farm will be strained to its utmost capacity to meet the demand.

When we bear in mind that the milk producing district is limited to that distance which a milk train can traverse, leaving at some hour in the afternoon, so as to enable it to reach New York before daylight, is it assuming too much to doubt the ultimate capacity of the district to supply the demand?

I have been asked: what shall we do with our mountain sheep pastures? To such I would say, keep winter cows; milk sells from one to two cents higher in the winter. By converting all the products of your home farms into forage and feeding it to cows will furnish the means for improving your lands. The mountain pastures afford good range for the cows while dry, the farrow ones making beef, their places to be supplied by new-milch ones in the fall, from the large dairy regions in the central part of the state.

All along the Harlem, reliable parties come up from New York and make their annual contracts for a certain and uniform supply. Their interest to have it to furnish to their customers being fully equal to that of the farmers to produce it, and they can always dispose of all the sour milk at half price, at least.

The following statements and explanations are from the Patent Office Report of 1861:—

STATEMENT 1.

Showing the quantity of Milk received in the city of N. York, from each station on the N. York and Erie railroad, for the year ending June 30, 1861.

Stations.	Quantity received from each station.	Dist. from N. Y. city.
	<i>Quarts.</i>	<i>Miles.</i>
Turner's	932,016	47
Monroe	2,524,560	50
Oxford .. :	1,875,844	52
Chester	4,852,048	55
Washingtonville	864,452	60
Goshen	4,017,192	63
Hampton	2,719,768	64
Middletown	2,618,048	67
Howell's	2,235,200	71
Otisville	1,108,520	76
Total	23,747,648

In 1847 this railroad company transported less than 15,000,000 quarts of milk over this road. In 1861 they carried nearly 25,000,000 quarts.

STATEMENT 2.

Showing the quantity of Milk received in the City of New York, from each station on the Harlem Railroad, for the Year ending June 30, 1861.

Stations.	Quantity received from each station.	Dist. from N. Y. city.
	<i>Quarts.</i>	<i>Miles.</i>
White Plains.....	86,310	23
Kensico	21,530	26
Unionville	88,250	29
Pleasantville	135,150	31
Chapequa	190,960	33
Mount Kisco	689,060	37
Bedford.....	859,060	40
Katonah ...	1,794,370	42
Golden's Bridge.....	1,476,850	44
Purdy's	2,092,090	47
Croton Falls.	1,799,310	48
Brewster's	3,789,460	53
Dykeman's	872,930	45
Towner's	2,227,780	58
Patterson's	1,983,700	61
Pawling's	1,496,730	64
South Dover.....	808,710	79
Dover Furnace.....	298,780	75
Dover Plains.....	605,750	77
Wassaic	1,407,850	82
Amenia.....	1,966,820	85
Sharon	205,470	88
Coleman's.....	529,820	90
Millerton.....	1,822,430	93
Boston Corner.....	194,680	100
Chatham	62,230	128
Total.....	27,507,080

STATEMENT 3.

Showing the quantity of Milk received in the city of N. York, from each station on the Long Island railroad, for the year ending June 30, 1861.

Stations.	Quantity received from each station.	Dist. from N. Y. city.
	<i>Quarts.</i>	<i>Miles.</i>
Willow Tree	75,650	12
Brushville	58,400	16
Hyde Park.....	131,400	18
Hempstead.....	930,850	22
H. Branch	80,300	20
Westbury	1,087,705	24
Hicksville	344,100	26
Syosett	441,650	30
Jerusalem	76,680	28
Total.....	3,326,730

The milk which is received in the city by these railroads is all of it kept 24 hours, most of it 36, and some 48 and even 60 hours, before it is used, and yet remains perfectly sweet. The act of transportation, even for a hundred or a hundred and fifty miles, does not seem to injure it. Charles Minot, general superintendent of the Erie Railroad Co., in a letter on the subject of the transportation of milk, says: "The favor with which Orange county milk is met in this city (New York), demonstrates that the transportation does not injure it."

On the Harlem railroad, the distance of a hundred miles from New York city, the movements of milk are as follows: Suppose the cows are milked about 7 o'clock *Monday afternoon*, and again at 5 o'clock on *Tuesday morning*; this milk, both night's and morning's, is carted from one to four miles to the depot, in open wagons, Tuesday from 3 to 4 in the afternoon. It then takes the cars, and in the milk train reaches New York about 4 o'clock *Wednesday morning*. One-half of the milk, that was milked Monday night, is 36 hours old, and the remaining part 24 hours old. Of this milk that which goes to the retail trade is consumed *Wednesday*, but that to the wholesale dealer is frequently kept till Thursday, perfectly sweet.

The milk brought to the city by wagons is conveyed to customers as soon as milked, and receives no special care from the producer, except so far as to dispose of it as soon as possible. It is nearly, if not all, consumed within a few hours after it leaves the dairy. It cannot keep, under the most favorable circumstances, but a few hours after it is distributed.

The consumption of milk must be much less in cities than in rural districts. It falls considerably below the average amount, taking the entire population of the country. The daily average to each individual in the thirteen States before named is *one pint*. The general average in the District of Columbia, including Washington, is less than *one-half a gill*. Estimating the average in New York at *one-half a pint*, which is a large estimate, the railroads supply over 600,000 people with the best milk consumed within its limits.

The contrast which the above methods of supplying cities with milk, presents, suggests the pertinent inquiry, why is it that milk furnished by railroads keeps sweet so much longer than that furnished by other methods? The answer is obvious. On the one hand, milkmen that do their own transportation own teams for that special purpose, and so regulate the hours of milking that they may save themselves as much trouble as possible, and be in market at proper times with their milk. *Therefore, in most cases, they cart it warm.* It is strained from the milk-pail into the cans, and is all disposed of before it has time to cool.

On the other hand, milkmen that depend on railroads for transportation, cannot send their milk at will. The train goes but once a day, and therefore *it is absolutely necessary for them to take some means to preserve their milk.* There is no necessity for milking in the heat of the day, or of hurrying milk to market before it is cool. Milking can be done at the best time, morning and evening.

In short, the answer is, in one case *care is taken to preserve the milk*, and in the other *care is NOT TAKEN to preserve it.*

Table No. 1.—Principal Milk-Supplying Towns on the Harlem Railroad,

Commencing about 24 Miles from New York.

	TOWNS.	Acres Improved.	Acres Unimprov'd.	Valuation of Real Estate.	Popula- tion.	Bushels of Grain.	Oxen, &c.	Cows.	Sheep.	Butter.	Cheese.	Tons Hay.
Westchester.	Bedford,	21,243	3,473	1,326,990	3,464	71,773	922	2,127	655	76,854	200	8,344
	New Castle, . . .	11,402	4,410	675,133	1,762	35,782	658	1,074	476	34,260	100	4,902
	No. New Castle,	11,201	2,381	697,388	2,415	33,941	634	808	136	92,006		4,600
	Somer's,	17,234	3,110	1,046,591	1,744	63,853	1,147	1,705	1,695	100,278	495	6,675
	No. Salem, . . .	10,970	2,051	801,427	1,528	28,882	634	1,265	417	77,376	120	4,590
	Lewisboro', . . .	12,740	4,924	810,785	1,775	40,660	781	1,386	440	62,767	925	4,390
		84,890		5,358,414		274,871		8,455	3,819			
Putnam.	Patterson,	13,789	6,523	609,825	1,422	25,400	1,000	1,179	539	61,400	3,375	4,060
	South East, . . .	18,056	3,163	990,179	2,185	44,692	966	2,457	154	96,300		6,582
	Kent,	15,241	6,617	425,020	1,539	29,274	1,165	1,493	1,420	75,856		4,261
	Carmel,	19,300	5,271	941,854	2,405	63,267	1,120	2,113	2,171	121,478		6,040
		66,386		2,966,888		162,633		7,242	4,284			
Dutchess Co.	Amenia,	17,707	6,859	1,113,550	2,199	68,431	1,111	1,592	4,547	85,055	9,856	5,109
	Dover,	17,482	9,187	902,455	1,925	38,127	1,283	1,285	1,480	55,951	3,840	4,464
	North East, . . .	18,056	6,193	770,020	1,757	85,842	1,002	1,151	7,497	62,825	8,925	3,475
	Pawling's,	19,076	9,773	602,993	1,792	33,207	1,268	1,479	2,689	89,460	950	5,210
	Pine Plains, . . .	14,235	3,941	612,687	1,453	61,582	711	678	5,723	39,090	5,188	2,369
	Stamford,	26,067	5,514	1,013,721	2,201	134,794	1,308	1,680	12,116	126,019	8,116	4,256
	Washington, . . .	31,671	4,977	1,134,555	2,740	138,328	1,698	1,870	8,037	156,553	5,744	6,660
	Unionvale,	12,000	2,875	436,572	1,463	52,637	602	693	3,177	57,614	1,757	3,146
	Beckman,	13,003	4,227	544,432	1,379	58,639	1,111	796	2,027	56,565	5,497	3,442
		320,373		16,456,285	36,729	1,088,861	19,123	26,921	55,405	1,529,268	54,322	

Table No. 2.
Principal Milk-Supplying Towns on the Route of the
Lebanon Springs Railroad.

TOWNS.	Acres Improved.	Acres Unimproved.	Valuation.	Population.	Bushels of Grain.	Oxen, &c.	Cows.	Sheep.	Butter.	Cheese.	Tons of Hay.
Chatham	26,856	4,381	1,094,968	4,023	151,242	1,338	1,452	6,579	130,875	10,284	4,283
New Lebanon	16,218	3,804	288,090	2,929	60,104	833	925	9,230	84,022	25,794	4,783
Nassau	20,281	5,754	530,010	3,000	79,352	1,176	1,188	3,458	124,500	8,725	3,803
Stephentown .	80,982	9,404	258,235	2,397	46,105	1,104	1,305	2,707	109,940	118,555	4,756
Berlin	19,437	16,759	216,280	2,167	39,398	676	1,187	3,680	59,071	250,646	3,280
Petersburgh .	17,075	7,388	203,344	1,663	43,849	780	770	5,708	45,543	82,820	2,861
Hoosick	31,341	8,339	1,374,017	4,120	146,483	1,455	1,243	22,394	69,325	36,590	6,356
Hancock,							619	4,296			
Willaimstown,							970	4,470			
	152,192		3,965,544	17,699	566,535	7,382	9,599	62,472	622,876	533,394	
Orange County	308,599	189,615	25,599,331	60,868	918,078	17,411	40,187	21,337	3,285,587	80,600	103,211

W O O L .

From the various reports of the Agricultural Department of the Patent Office, and other sources, I glean the following facts, by which it will be seen that the number of sheep is gradually diminishing in the New England and Middle States, and that they are beginning to recede from Ohio, while they are rapidly increasing in the Western and South Western States and California.

It is a conceded fact that the Western States can produce Wool for 25 or 30 cents per lb., and make "a better living" than the Eastern and Middle States can at 55 or 60 cents.

This fact alone should be sufficient to draw the attention of our agriculturist to the necessity of seeking some by more remunerative branch. But when he studies as he ought, the facts in relation to the sources of supply of foreign Wools, the cheapness with which it is produced, the low Tariff under which it is introduced, to compete even with our Western Wools, is there much inducement left for growing Wool as a principal source of income?

There is great doubt about the Tariff on low priced Wool being increased. For 25 years, the manufacturer has managed to keep a liberal one on manufactured goods, and a mere nominal one on Wools costing 24 cents or under. Scarcely any comes in invoiced higher than 24 cents, while the great mass comes in under 12 cents. (See tables.) The Manufacturers are comparatively few in number, wielding a large capital, active, enterprising, able men, accustomed to take good care of their own interests; while the Wool Growers are so numerous and scattered as to become unwieldy, and with such small and divided interests, that they cannot combine to secure their just share of protection. (It was a knowledge of this, that led us, many years since, to abandon Wool Growing.)

The Wool Grower hence, is, and has always been, more or less at the mercy of the Manufactures—in this way—suppose the consumption of the country required 200,000,000 pounds as an annual supply, which was furnished from the following sources, and at the estimated cost, say

100,000,000 Domestic at 60 cents,	-	\$60,000,000
100,000,000 Foreign " 10 "	-	10,000,000

Total cost of supply, - - \$70,000,000

Now, while the Domestic Production was safe for 100,000,000 pounds, how easy for the Manufacturers to arrange for an import-

ation of 125,000,000 pounds of low price wools;—forcing this surplus of 25,000,000 upon the market—it creates an over supply, and as a natural result, reduces the price of all American Wools, more or less, as the demand for goods may stimulate activity. If it has the effect of reducing the price of domestic wools ten cents per pound, let us see its effect upon this great interest:

100,000,000 Domestic, at 50 cts.,	-	-	\$50,000,000
125,000,000 Foreign, " 10 "	-	-	12,500,000

Total cost of supply,	-	-	\$62,500,000
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Showing a loss to the Wool Growing Interest of \$7,500,000:

At 15 cents reduction of price of	-	-	\$12,500,000
" 20 " " " "	-	-	17,500,000

As the Tariff upon Domestic Goods remains high and unchanged, the goods sell at the same rate as upon a higher cost of the Wool, the difference being taken from the pockets of the wool grower, and put into those of the manufacturer, without any advantage to the public at large.

Does not the enormous increase of importations as shown by the tables, justify the impression that they are the cause of Wool ruling so much lower in proportion, for the last few years, than other agricultural products? At no period within four years, has wool ruled as high in proportion as woollen goods, while there was a large demand for military woollen goods, the consumption of wool from this source alone was enormous;—it was estimated by the Boston Board of Trade that 50,000,000 pounds of wool were used in 1862, in the manufacture of Army Goods.

Having now settled down to a regular ordinary supply and demand, it is wise to investigate and act understandingly. My argument does not apply to the raising of early lambs for market, or the fattening of sheep for mutton, as each can be profitably followed to a moderate extent; but rather to that branch which looks mainly to the Wool Crop, as a source of income.

The tables and facts are taken from reliable sources. Table No. 1, gives the number of Sheep in the States named in 1850 and 1860, showing the decrease East and the increase West. No. 2, the number of pounds of Wool produced in the various States in 1850 as compared with 1860. No. 3, the production of California. No. 4, the Tariff upon imported Wools, the importations from 1841 to 1857, and the sources of present supply.

TABLE No. 1.

	NUMBER OF SHEEP	
	1850.	1860.
Connecticut,	134,181	117,107
Maine,	451,577	452,472
Massachusetts,	188,657	114,829

New Hampshire,	384,756	310,534
Rhode Island,	44,296	32,624
Vermont,	1,014,122	721,993
New Jersey,	160,458	135,228
New York,	3,453,241	2,617,855
Pennsylvania,	1,822,357	1,631,540
Illinois,	894,043	775,230
Indiana,	1,122,493	1,002,724
Ohio,	3,942,929	3,063,567
California,	17,574	1,075,718
Iowa,	149,960	258,228
Kansas,	000	15,702
Michigan,	746,435	1,465,477
Minnesota,	80	13,123
Missouri,	762,511	937,445
Oregon,	15,382	75,936
Texas,	100,530	783,618
Wisconsin,	124,896	332,454

TABLE NO. 2.

	NUMBER LBS. WOOL.	
	1850.	1860.
N. E. States,	7,000,000	6,500,000
New York,	10,071,300	10,708,927
Ohio,	10,196,371	10,608,927
Michigan,	2,043,000	3,960,000
Wisconsin,	253,000	1,011,000
Iowa,	373,000	660,000
Missouri,	1,627,000	2,329,000
California,	5,520	2,683,000

The supply from the Western States for the past five years has doubtless increased in an augmented ratio.

It is stated in the "Country Gentleman," that the Wool Crop of Michigan for 1865, was over 11,000,000 pounds.

TABLE NO. 3.—PRODUCTION OF CALIFORNIA.

1855	360,000	1860	3,260,000
1856	600,000	1861	4,600,000
1857	1,000,000	1862	6,400,000
1858	1,428,000	1863	7,600,000
1859	2,378,000	1864	8,000,000

Of the crop of 1864, there were shipped to	N. York,	5,491,814
"	Boston,	842,850
		<hr/> 6,334,664

TABLE No. 4.

The Tariff on Wool costing 12 cts. or less at the place whence imported, is	-	-	-	-	-	3 cts. per lb.
Exceeding 12 and less than 24 cts.,	-	-	-	-	-	6 " "
" 24	"	32	"	10 cts. per lb. and 10 per ct.		
" 32 and upwards,	-	-	-	12 " " and 10 " "		
On Wool mixed with dirt,	-	-	-	12 " " and 10 " "		

The importations of Wools from 1841 to 1857—a period of 17 years, averaged 17,000,000 pounds, at an average cost of nine cts. ranging from 6 to 13-9.

The importations for for four years, ending June 30, 1865, were 287,000,000 lbs., averaging per year 71,750,000 lbs., the duty paid averaging less than 5 cents per pound.

The consumption of the country is variously estimated from 170 to 200,000,000 pounds per year.

The duty upon wool imported into New York for six months, ending Dec. 31, 1865, averaged only 4-84 cts. per lb.

Of the importation of the six months referred to there was entered, 50 lbs. costing 62 cts., paying \$9-10 duty—all the rest came in at six cts. or under.

The production, as shown by the reports for 1864, was in the						
loyal States,	-	-	-	-	-	91,298,965
" " California,	-	-	-	-	-	8,000,000

						99,298,965
Average importation,	-	-	-	-	-	71,750,000

171,048,965

Australian Wools, and the Cost of Production in 1862.—There was rented by the Government in one district,

6,277,340	acres	under	$\frac{1}{2}$	cent	per	acre,
2,370,680	"	"	1	"	"	"
3,604,365	"	"	2	"	"	"
9,203,617	"	"	4	"	"	"
4,911,307	"	"	6	"	"	"
2,334,228	"	"	8	"	"	"
1,283,836	"	"	10	"	"	"
918,512	"	"	12	"	"	"
665,652	"	"	16	"	"	"
295,868	"	over	16	"	"	"

31,875,468

"One Hut Keeper and one Shepherd take care of from 1,000 to 2,000 head. The sheep are herded at night. Early in the morning, they are driven to pasture. As soon as removed from the enclosure, the shepherd starts with the flock, and allows them to

travel and feed in a given direction until about mid-day, when they are turned homeward. By this arrangement the sheep travel from four to eight miles daily. By taking different directions each day, a change of pasture is secured."

Wages paid Hut Keeper, \$125 to \$150,

" " Shepherd, \$150 to \$200, and rations about \$75 each. At the highest rates \$500 pays the wages and board of the two men, which is equal to 25 cts. each on 2,000 head.

I leave for the reader to estimate the cost of pasture at the rates given above. In twenty years the productions of Australia have risen from 17,436,780, to 77,173,446 pounds a year. The yearly export of Australia, South Africa, and British India, increased from 1844 to 1863, 96,294,655 pounds.

South American Wool.—The Rev. C. D. Carrow, late Superintendent of the Mission of the M. E. Church in South America, in an article upon sheep farming on the Pampas, says:

"There is perhaps no section of the globe, that offers to the sheep farmer advantages superior to those of the Buenos Ayrean and adjacent Pampas. Through all seasons of the year, flowers bloom and fruits ripen in the open air, and there is more of pasture of fresh greenness and beauty, in winter than in summer. No feeding is required at any time, and both for grazing and horticulture, the soil and climate afford exhaustless resources.

"Sheep farms vary in extent from one to fifty square leagues, the square league containing 5,760 acres. A farm of one square league will sustain twelve or fourteen flocks of 1,000 each.

"The farmers usually divide their sheep into flocks of 1,000 each. In a very few instances a flock is permitted to grow to the size of 2,000, and even 3,000, and is kept up to that number. But the prevailing rate of increase being about thirty three and one third per cent., a flock of a thousand having doubled itself in three years, is, at the end of that time, divided into two. In this way flocks continue to be multiplied, until, in some cases, two hundred thousand sheep may be seen feeding on a single farm.

"As there is no necessity for feeding, the sheep of the Pampas require comparatively but very little attention. One man, assisted by a small boy, can do all the work essential to the care of a single flock."

Wool is sold in Brazil in bundles of 25 pounds. I saw it quoted in a recent letter from there at from \$2.50 to \$3.00 per 25 pounds.

Saxons, Merinos, and fine grade sheep have been imported there in large numbers, from Europe and this country; 4,000 being sent there in one season.

At an auction sale in New York, Saxon rams' wool sold at 10½ cents per pound. Mestizo, (a grade wool,) at 8¼ cents.

**Table showing the productions of Corn and Oats,
And the increase in ten years, as compared with New York.**

	CORN		OATS	
	1850.	1860.	1850.	1860.
Illinois,	57,646,984	115,296,799	10,087,241	15,336,072
Indiana,	52,964,863	69,641,591	5,655,014	5,028,755
Iowa,	8,656,799	41,116,994	1,524,845	5,879,653
Michigan,	5,641,420	12,152,110	2,866,056	5,073,098
Kansas,		5,678,884		80,744
Minnesota,	16,725	2,987,570	30,582	2,202,052
Missouri,	36,214,137	72,892,157	5,278,079	3,680,870
Ohio,	59,078,695	70,637,140	13,472,742	15,479,133
Wisconsin,	1,988,979	7,595,290	3,414,673	11,059,270
	222,208,502	308,068,485	42,228,731	62,817,647
New York,	17,858,400	20,061,048	26,552,814	35,175,133

INDIAN CORN AS FUEL.—"The Western Rural, Detroit, has an article on this subject, arguing that farmers on the prairies can raise Indian corn to burn as fuel, cheaper than they can raise wood, and cheaper than they can buy it, even if at low rates, if they have far to haul it.

"Fifty bushels of corn will make a cord, and is as valuable as the same amount of best hickory wood. If the value of the corn is less than that of a load of hickory wood, or its equivalent in coal, it must be the cheapest fuel. At present corn in Muscatine, Iowa, is worth 18 cents per bushel, or \$9.00 per cord, and hickory wood \$12.00 per cord, showing a balance in favor of corn."

A paper at Whiteside, Illinois, lately published the following comparison between corn and coal at that point: "A ton of corn is worth six dollars, a ton of coal at the railroad station costs ten dollars. If the farmer takes his corn in and draws out the coal, the cost of the latter will, on an average, be enhanced two dollars, when a ton of coal will cost twice what a ton of corn will fetch, and it is estimated that two tons of corn will burn longer, and make as good a fire, as one ton of coal."